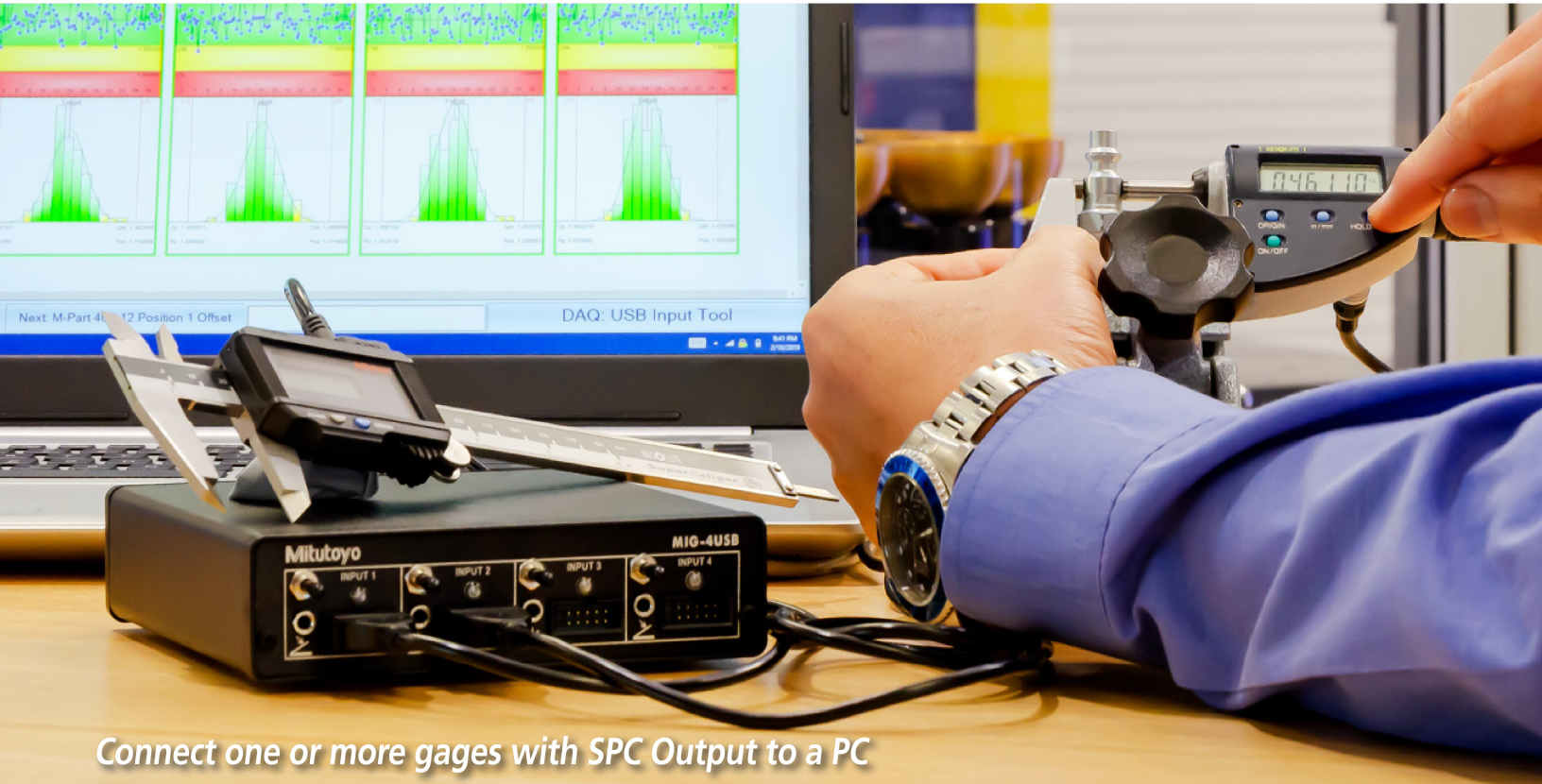# **Mitutoyo**

# **Easy Data Management**
## **Interfaces, Cables and Accessories**

**MeasurLink® ENABLED**
Data Management Software by Mitutoyo

*Connect one or more gages with SPC Output to a PC*

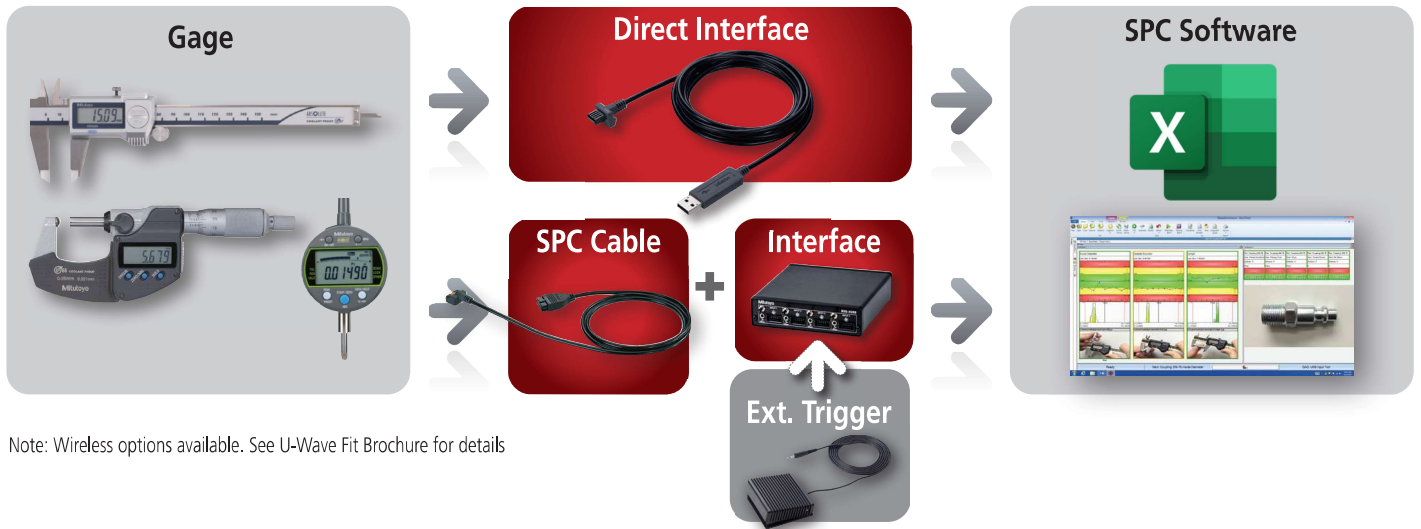Small Tool Instruments and Data Management

**NEW** Products

# Plug and Play Interfaces

Collect data quickly and easily with any of Mitutoyo's Data Management products. Whether your need is to manage and retain incoming data, gather data from multiple tools to create a customer report, perform SPC, or simply send data into Excel, Mitutoyo has the solution.

Benefits:

- No drivers, downloads, or installs required
- Send data into any program by converting your measuring tools into a virtual keyboard (HID)
- Request data from the PC
- Request data on a timed interval
- Supports Virtual COM Port (VCP)
- Converter cables easily transfer data from RS-232 devices to a PC or interface without special software and set-up

**Gage**

**Direct Interface**

**SPC Software**

**SPC Cable** + **Interface**

**Ext. Trigger**

Note: Wireless options available. See U-Wave Fit Brochure for details

## USB Multiplexers

The USB Multiplexer is an interface that connects multiple gages with SPC Output to a PC. The benefits of a Digimatic Multiplexer include:

- The ability to transfer data from the gage into any software such as Excel or MeasurLink®
- Simplifying multi-gage inspection stations to a single USB connection reduces the number of connections required to the PC
- Supports keyboard emulation (HID), Virtual COM Port (VCP) and RS232 connections
- MAX, MIN and TIR collection modes for a single gage or across all connected gages
- Data input from Digimatic, d2, and RS-232 devices
- Timed and continuous data streaming
- Map ports to specified spreadsheet columns or rows for organized data collection
- Date and timestamp for spreadsheets

MIG-1USB          MIG-2USB          MIG-4USB          MIG-8USB

SPC Cables are used to connect gages to the Multiplexer. A USB connection to the PC allows data to be transferred by keyboard emulation (HID) or Virtual COM Port (VCP).

Multiplexers can be connected together to form a system that supports up to 99 gages. Data from single or multiple ports can be sent by the multiplexer, PC, or an external trigger.

NEW Products

# Data Hardware Options

**Mitutoyo**

## Direct Interface

### USB Input Tool Direct- ITN
This tool is a slim, single-piece cable with smooth routing for improved workability. Simply plug and play! No drivers or software required to input data to the PC.

| Part No. | Description | Part No. | Description |
|---|---|---|---|
| 06AFM380A | USB-ITN-A** | 06AFM380D | USB-ITN-D |
| 06AFM380B | USB-ITN-B | 06AFM380E | USB-ITN-E |
| 06AFM380C | USB-ITN-C | 06AFM380F | USB-ITN-F |
| | | 06AFM380G | USB-ITN-G |

Note: For more information see official brochure

## Interface

### Input Tools
The Input Tool for RS-232 and the Input Tool for USB allows you to connect any Mitutoyo gage with SPC output directly to your PC. These input tools feature a data button separate from the gage and support an optional external trigger.

| Part No. | Description |
|---|---|
| 264-016-10 | USB INPUT TOOL** |
| 264-007 | INPUT TOOL FOR RS232C OUTPUT |

Note: For more information see official brochure

### Data LOGGER DP-1VA
Store up to 1000 measurements and batch transfer to a spread sheet or immediately print measurements and statistical results. Supports gage input at timed intervals and optional external trigger.

| Part No. | Description |
|---|---|
| 264-505A | DP-1VA, 120V AC W/ D2 OUTPUT** |

Note: For more information see official brochure

### USB Multiplexers
Mitutoyo USB Multiplexers are available in 1, 2, 4 or 8 port models. The 1, 2 and 4 port models have integrated trigger switches.

| Part No. | Description |
|---|---|
| 64AAB637 | MIG-1USB, V6.0 W/D2 COMPAT, SINGLE INPUT |
| 64AAB638 | MIG-2USB, V6.0 W/D2 COMPAT, DUAL INPUT** |
| 64AAB639 | MIG-4USB, V6.0 W/D2 COMPAT, 4 INPUT |
| 64AAB640 | MIG-8USB, V6.0 W/D2 COMPAT, 8 INPUT |

## SPC Cables

**10-pin connector**

A B C D E F G

### SPC Cables
Mitutoyo SPC Cables all have a common 10-pin connector on one end. This end connects to the USB Input Tool, multiplexer or DP-1VA Data LOGGER. The other end connects to the desired gage. Be sure to choose the connector that matches the Digimatic SPC Port on your tool. Some SPC cables have an integrated Data Send Button that can be used if the tool is not equipped. SPC cables come in 1m and 2m lengths.

| Part No. | | Description |
|---|---|---|
| 1m | 2m | |
| 05CZA624 | 05CZA625 | SPC CABLE TYPE A |
| 05CZA662 | 05CZA663 | SPC CABLE TYPE B |
| 959149 | 959150 | SPC CABLE TYPE C |
| 936937 | 965014 | SPC CABLE TYPE D |
| 937387 | 965013 | SPC CABLE TYPE E |
| 905338 | 905409 | SPC CABLE TYPE F |
| 21EAA194 | 21EAA190 | SPC CABLE TYPE G |

Note: Refer to catalog for correct cable selection

## Ext. Trigger

### External Triggers
Manually trigger data using the Push button switch or for hand-free data collection use the Foot Switch.

| Part No. | Description |
|---|---|
| 937179T | FOOT SWITCH** |
| 64AAB644 | PUSH BUTTON SWITCH |
| 12AAJ088 | HEAVY-DUTY FOOT SWITCH |

## Accessories

### Extension Cables
Allows extension of the SPC Cable by 6 or 10 feet.

| Part No. | Description |
|---|---|
| 64AAB645 | DIGIMATIC EXTENSION CABLE, 6'** |
| 64AAB646 | DIGIMATIC EXTENSION CABLE, 10' |

### Extension Adapters
Extend the length of an SPC cable with the 10-pin(M/M) extension adapter.

| Part No. | Description |
|---|---|
| 64AAB647 | DIGIMATIC EXTENSION ADAPTER, W/AC |
| 02ADF640 | EXTENSION ADAPTER/DIGIMATIC CABLE** |

### Serial Converter Cables
Convert the signal from a serial output gage to Digimatic or USB to be used with any interface* or PC.
*Extension adapter w/AC needed for SPC converter cables if not used with MIG-2, MIG-4, MIG-8

| Part No. | Description |
|---|---|
| 64PMT114 | CONVERTER CABLE, RS-232C TO SPC, 9 PIN MALE |
| 64AAB641 | CONVERTER CABLE, RS-232C TO SPC, 25 PIN MALE |
| 64AAB642 | CONVERTER CABLE, RS-232C TO USB, 9 PIN MALE** |
| 64AAB643 | CONVERTER CABLE, RS-232C TO USB, 25 PIN MALE |

### Serial Cables and Adapters
Use serial cables to connect RS-232 output devices and equipment to a PC or adapters to change the RS-232 connector.

| Part No. | Description |
|---|---|
| 64AAB532 | USB 2.0 RS-232 SERIAL ADAPTER W/LED INDICATORS** |
| 12AAA807 | RS-232C CONNECTING CABLE NULL |
| 12AAA882 | RS-232C CONNECTING CABLE STRAIGHT |
| 64PTS268 | F/F NULL MODEM ADAPTER-DB-9 (F) TO DB-9 (F) |

**Pictured

# USB Multiplexers

**Toggle switch**
Available on MIG-2 & 4 USB Multiplexers. Used to trigger data or start and stop MAX, MIN, TIR data collection

**Push button switch**
Available on MIG-1 USB Multiplexers. Used to trigger data or start and stop MAX, MIN, TIR data collection

**10-pin Digimatic port and LED indicator**
Available on MIG-1, 2, 4, & 8. LED verifies data input and MAX, MIN & TIR data collection 10-pin port accepts data from any Mitutoyo Digimatic tool with an SPC cable

**Trigger Port**
Available on MIG-1, 2, 4, & 8. Used to trigger data or start and stop MAX, MIN, TIR data collection with an external trigger. Can be used to trigger all data ports

| Model | MIG Input | | | | MIG Output | | Data Send | | | | | | Power | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | # of Inputs | 10-pin Digimatic | Serial RS232 | Pass-Thru Port | USB | RS232 | Button | Timed | Max/Min/TIR | Continuous | Polling from PC | Column/Row Mapping | Power Supply | Supplies Power** |
| **MIG-1USB** | 1 | Y | -- | -- | HID/VCP | -- | Push | -- | Y | Y | Y | Y | from USB port | -- |
| **MIG-2USB** | 2 | Y | RS232 DB9M | Y | HID/VCP | RS232 DB9F | Toggle | Y | Y | Y | Y | Y | Power Adapter | Y |
| **MIG-4USB** | 4 | Y | RS232 DB9M | Y | HID/VCP | RS232 DB9F | Toggle | Y | Y | Y | Y | Y | Power Adapter | Y |
| **MIG-8USB** | 8 | Y | RS232 DB9M | Y | HID/VCP | RS232 DB9F | -- | Y | Y | Y | Y | Y | Power Adapter | Y |

All MIG units include USB cable, RS-232C cable*, AC adapter*, and USB flash drive with additional drivers.
*  MIG-1USB does not include RS-232C cable or AC adapter.  Power is supplied by USB.
**MIG interfaces can have a feature where power can be supplied to gages or converter cables that can accept it, such as: 64PMT114, LGS Linear Gages, etc.

MIG-1USB    MIG-2USB    MIG-4USB    MIG-8USB

**Rear View**

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